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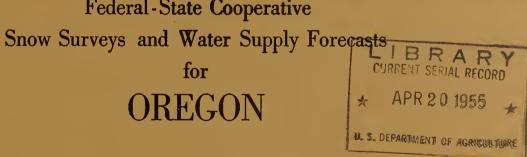






Federal-State Cooperative

OREGON



SOIL CONSERVATION SERVICE UNITED STATES DEPARTMENT OF AGRICULTURE AND OREGON AGRICULTURAL EXPERIMENT STATION

Data included in this report were obtained by the agencies named above in cooperation with the Oregon State Engineer, U.S. Forest Service, National Park Service and other Federal, State and local organizations.

TO RECIPIENTS OF COOPERATIVE SNOW SURVEY AND WATER SUPPLY FORECAST REPORTS:

Forecasts by U. S. Weather Bureau of total annual streamflow October-September, inclusive, at more than 300 gaging stations are issued monthly January through May in the publication WATER SUPPLY FORECASTS FOR THE WESTERN UNITED STATES.

Weather Bureau forecasts of runoff presented in that bulletin are computed from procedures based on mathematical analysis of the relation between precipitation and runoff.

The Weather Bureau bulletins may be secured by writing to:

Hydrologist in Charge River Forecast Center U. S. Weather Bureau 712 Federal Office Building Kansas City 6, Missouri

For current information on local river and flood conditions, reference should be made to the appropriate River District Office listed below:

Meteorologist in Charge......Columbia River and Weather Bureau Office 320 Custom House Portland 9, Oregon

tributaries below Grand Coulee Dam, except the Snake River and tributaries.

Meteorologist in Charge.....Oregon and California Weather Bureau Airport Station Box 1072 Medford, Ore.

Coast drainage, from and including Umpqua River Basin, southward to and including Klamath River and tributaries; the Great Basin in Oregon

State of Oregon

FEDERAL-STATE COOPERATIVE

SNOW SURVEYS AND WATER SUPPLY FORECASTS

FOR

OREGON

Issued

April 9, 1955

Report Prepared by

W. T. Frost, Hydraulic Engineer and Manes Barton, Assistant Water Forecaster

Soil Conservation Service and Oregon Agricultural Experiment Station 209 S. W. 5th Avenue Portland 4, Oregon

Issued by:

Harold E. Tower State Conservationist Soil Conservation Service

F. Earl Price Director Oregon Agricultural Experiment Station



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Anthony Lake
Beaver Reservoir
Bourne
Dooley Mountain
Eliertyson Meadows
Gold Center
Summit Springs
Taylor Green

1885 1885 1885 1888 1888 1888 1895 1707

15E

9

32

Schneider Meadows

PINE CREEK BASIN

GRANDE RONDE RIVER BASIN

15E 15E 13E 13E 15E 15E 15E 16E

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Arbuckle Mountain Emigrant Springs

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N.

Tollgate

1803

UMATILLA RIVER BASIN

LOWER COLUMBIA DRAINAGE

WALLA WALLA RIVER BASIN

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34E

3LE

KE BASIN (Cregon & Calif. Coast Drainage)

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Bear Creek
Buckskin, Lower
Buckskin, Upper
Fox Creek
Granite Peak
Martin Creek
Midas
Titemean
76 Creek

5250 5150 5150 6800 6800

328 32E 33

33228

Blue Mountain Spring Crane Frairle Eldorado Pass Llake Creek Rock Spring Stinking Water

18E16 18E20 18E20 18E18 18F1

MALHEUR RIVER BASIN

5250

36E 10E 35% 35%

1128 1138 1138 1138

3522

Barney Creek Blue Mountain Summit Doolog Mountein Gold Center Tipton

BURNT RIVER BASIN

POWDER RIVER BASIN

not on the

(The following courses are adjacent to but Owyhee Drainege and partially reflect snow on this watershed.)

26 (Nev) 30 (Nev) 31 (Nev) 31 (Nev) 31 (Nev) 31 (Nev) 32 (Nev) 34 (Nev) 35 (Nev) 36 (Nev) 36 (Nev) 35 (Nev) 35

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UPPER COLUMBIA DRAINAGE (Lower Snake in Oregon)

OWYHEE RIVER BASIN

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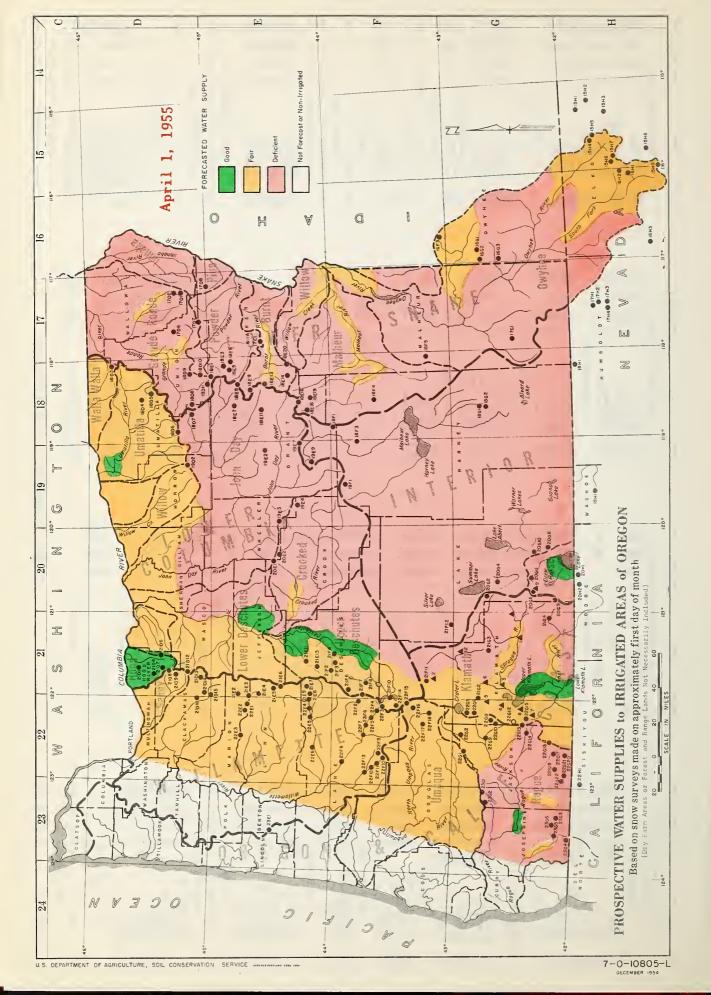
18E 17E 21E

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13E



WATER SUPPLY OUTLOOK

FOR OREGON

April 1,1955

Most Oregon water users can expect only a "fair" to "poor" water supply this year even though storms during the latter part of March markedly increased the mountain snow-pack. Heavy spring rains would improve this outlook.

- SNOW-COVER: March storms produced about 25 percent more snowfall than usual bringing April 1 snow-cover up to 90 percent of normal. Water content of snow is below 80 percent average in the Owyhee, Pine, Imanha, Wallowa, Rogue (except Illinois), Klamath (except Gerber-Clear Lake), and Interior (except Harney Basin) watersheds. (See Appendix pages 1-9 for addition al snow data.)
- SOIL MOISTURE: Mountain soils are very dry under the snow-pack, particularly in eastern and southern Oregon. These dry soils will take up much of the early snow-melt water. Soils at median elevations are now better wetted due to heavy snowfall during the latter part of March and its subsequent melting.
- RESERVOIRED WATER: Stored water is quite short with 14 out of 26 reporting reservoirs less than helf full. Total storage is about one-helf of the ten year (1943-52) average and two-thirds of that of one year ago. Reservoirs with particularly low storage are Antelope, Owyhee, Warmsprings, Agency Valley, Unity, McKay, Detroit, Emigrant Gap, Cottonwood and Drew.

Stored water in many areas will augment streamflow sufficiently to insure at least fairly adequate irrigation water supplies for this year. (See page 7 for additional reservoir data.)

- PRECIPITATION: Valley winter precipitation was two-thirds normal this year with the Upper Deschutes area receiving the low of only one-third normal. The highest area was the Willamette Valley with three-fourths normal winter precipitation. March precipitation was about 80 percent normal. Fall precipitation was only half normal. (See Appendix page 11 for additional precipitation data.)
- TREMIFLOW: Below average streamflow is forecast throughout Oregon except for the Umatilla Basin and certain streams in the Willamette Valley. Short water supplies are foreseen in the following watersheds: Owyhee, Malheur, Burnt, Powder, Pine, Imnaha, Grande Ronde, John Day, Crooked, Rogue (except for Upper Rogue), Sprague, and Interior drainages. Stored water in these basins is expected to improve the situation for those water users served from reservoirs. (For detailed information on water supply conditions in local areas see narrative section beginning on page 9)

March streamflow² was extremely low this year with four reporting streams experiencing the lowest March flows on record. These were the Grande Ronde at LaGrande, South Fork Walla Walla near Milton, Umatilla near Umatilla and John Day at Service Creek. (See Appendix page 10 for additional data.)

1 From preliminary data furnished by U. S. Weather Bureau, Portland, Oregon 2 From preliminary data furnished by U. S. Georlogical Survey, Portland, Oregon



The following summarized runoff forecasts are based principally on mountain snow cover and on the assumption that precipitation and temperature during the forecast period will be near average. Appreciable deviations from normal of temperature and/or precipitation during the forecast period will correspondingly modify

these forecasts.

these forecasts.				· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·
		asonal Stre		Thousands	of Acre F	
Basin, Stream	Forecast	%	Fore-			10 - Yr.
and	Runoff	10-Yr.	cast	Measured		Average
Station	1955	Ave.	Period	1953	1952	1943-52
Columbia River	84500.0	82	Apr-Sept.	91404.0	98619.0	102982.0
			JUMBIA BASII KE IN OREG			
Owyhee River Basin						
Owyhee Reservoir	184.0	38	Apr-Sept.	324.6		486.4
net inflow 1	166.0	35	Apr-July	300.8	1432.4	468.4
Malheur River Basin						
Malheur River,	42.0	50	Apr-Sept.	106.4	192.2	83.7
nr. Drewsey						
Malheur River, N.Fk.,	36.0	55	Apr-Sept.	80.1	122.0	65.2
at Beulah						
Burnt River Basin						
Burnt River,	24.0	52	Apr-Sept.	61.4	65.2	46.5
nr. Hereford	,		1 1	·		
Powder River Basin						
Powder River,	39.0	59	Apr-Sept.	93.0	88.7	66.0
at Salisbury	38.0	59	Apr-July	90.I	87.1	64.1
	50.0			/ / /	0,.1	04.1
Imnaha River Basin						
Imnaha River	170.0	55	Apr-Sept.	359.9	424.3	308.0
at Imnaha	1,0.0		11p1 00p0.	227.	464.7	0.00
Grande Ronde River						
Basin						
Wallowa River, E.Fk.,	7.5	65	Apr-Sept.	14.4	12.6	11.6
nr. Joseph4	6.0	65	Apr-July	10.9		
*	30.0	62		•	10.3	9.3
Hurricane Creek,	50.0	02	Apr-Sept.	56.9	55.3	48.2
nr. Joseph	90.0	68	^ ~ ~ .	212.0	21 ~ 0	7.00.0
Lostine River,	90.0	00	Apr-Sept.	141.8	145.8	132.3
nr. Lostine	1.8 0	41.		70 0		
Bear Creek,	48.0	64	Apr-Sept.	73.8	79.7	75.0
nr. Wallowa	60.0	٥٢		- /		
Catherine Creek,	62.0	85	Apr-Sept.	96.1	90.6	73.3
nr. Union	760.0	90				
Grande Ronde River,	160.0	82	Apr-Sept.	234.9	183.2	194.4
at LaGrande						

^{*}Discharge data from preliminary records of U.S. Geological Survey and Oregon State Engineer. 1954 records not available at this time.

^{**}Forecast by Boise Office, Soil Conservation Service. Corrected for storage. From U.S.B.R. records of inflow.

²⁰bserved flow / change in storage in Agency Valley Reservoir.

³⁰bserved flow plus change in storage in Unity Reservoir. 4Tholudes power plant tailrace.



Streamflow Forecasts	- April 1,	1955 (Con	it'd.)			3.
	Se	asonal Str	eamflow in	Thousands	of Acre Fe	
Basin, Stream	Forecast	%	Fore-	_		10 - Yr.
and	Runoff	10-Yr.	cast	Measured		Average
Station	1955	Ave.	Period	1953	1952	1943-52
		LOWER CC	LUMBIA BASI	N		
Umatilla River Basin						
Umatilla River,	120.0	123	Apr-Sept.	С	103.0	97.8
nr. Gibbon						
Umatilla River,	230.0	121	Apr-Sept.	С	184.8	189.5
at Pendleton	225.0	122	Apr-July	С	180.5	184.8
McKay Creek	34.0	113	Apr-Sept.	C	23.3	30.1
nr. Pilot Rock	33.4	111	Apr-July	С	23.2	30.0
Walla Walla River						
Basin	70.0	00	A	71 0	٥٢ ٥	79 0
Walla Walla R.,So.	72.0	92 92	Apr-Sept.	74.2 59.4	85.0	78.0
Fk.,nr. Milton	59.0	92	Apr-July	59•4	70.4	64.2
John Dar Dirron Pagin						
John Day River Basin Strawberry Cr.	6.0	69	Apr-Sept.	11.1	10.5	8.7
nr. Prairie City	0.0	0)	whr -peh c.		10.0	0.1
John Day River	36.0	67	Apr-Sept.	61.5	67.2	54.0
at Prairie City ⁵	33.0	68	Apr-July	54.9	58.0	48.2
John Day River,	95.0	71	Apr-Sept.	165.3	172.6	134.6
Mid.Fk. at Ritter	//•O	1-	11p1 20p 0 •	107.7	1,200	1)400
John Day River,	195.0	72	Apr-Sept.	333.8	309.8	271.0
N.Fk., nr. Dale	177.0	, _	P	,,,,,,,	,,,,,	_,
,,						
Crooked River Basin						
Crooked R.,	74.0	55	Apr-Sept.	173.6	205.8	133.9
nr. Post			• •			
Ochoco Res., net	10.5	30	Apr-Sept.	С	44.9	34.5
inflow ⁶						
Deschutes River Basin						
Crescent Creek	20.0	74	Apr-Sept.	40.9	47.2	27.2
at Crescent Lake						
Little Deschutes R.,	77.5	72	Apr-Sept.	138.3	171.9	107.7
nr. Lapine	71.0	75	Apr-July	118.8	154.9	94.1
Odell Cr.,	29.4	88	Apr-Sept.	С	44.1	33.3
nr. Crescent	60.0	01	۸ ۵ .		0.5.5	0
Deschutes River,	60.0	84	Apr-Sept.	75.0	89.2	71.8
below Snow Creek	120.0	88	A			7.07 ed
Crane Prairie Res.	120.0	00	Apr-Sept.	С	С	136.7 ^d
TITI TOM.						

^{*}Discharge data from preliminary records of U. S. Geological Survey and Oregon State Engineer. 1954 records not available at this time. 50bserved flow / Prairie Power Canal.

70bserved flow / changes in storage of Crescent Lake Reservoir.

d₁₉₅₂ excepted.

⁶⁰bserved flow of Ochoco Cr. / Canal / changes in storage of Ochoco Res.

⁸From State Engineer's file #3220a, tabulating total inflow to Crane Prairie Reservoir and outflow, showing the loss in the Reservoir. Records not available.



Streamflow Forecasts - April 1, 1955 (Cont'd.)							
	S	easonal Str	eamflow in	Thousands o	f Acre Fe	et	
Basin, Stream	Forecast	%	Fore-			10 - Yr.	
and	Runoff	10-Yr.	cast	Measured R		Average	
Station	1955	Ave.	Period	1953	1952	1943-52	
Deschutes River Basi:	n						
(Continued)							
Deschutes River	498.0	89	Apr-Sept.	661.2	765.7	560.8	
at Benham Falls ⁹	338.0	90	Apr-July	433.2	533.5	377.6	
Tumalo Creek,	42.0	76	Apr-Sept.	c	81.0	55.4	
nr. Bend ¹⁰							
Squaw Creek	46.0	86	Apr-Sept.	57.8	58.8	53.7	
nr. Sisters							
White River,	160.0	90	Apr-Sept.	159.8	171.2	178.2	
below Tygh Valley	142.0	90	Apr-July	142.2	153.7	158.2	
0.0							
Hood River Basin							
Hood River, W. Fk.,	155.0	93	Apr-Sept.	138.9	155.8	166.6	
nr. Dee	135.0	93	Apr-July	118.0	135.9	144.8	
Hood River,	320.0	91	Apr-Sept.	314.5	324.7	351.1	
nr. Hood Riverll	270.0	90	Apr-July	258.7	276.3	299.1	
	_, _	·	1 0				
Willamette River Bas	in						
Row River,	102.0	94	Apr-Sept.	146.3	107.5	108.2	
nr. Dorena	97.4	94	Apr-July	141.3	104.3	103.9	
McKenzie R.,	615.0	100	Apr-Sept.	658.1	674.2	616.3	
at McKenzie Bridge	471.0	100	Apr-July	491.1	512.2	472.2	
McKenzie River,	1300.0	99	Apr-Sept.	1465.2	1434.3	1319.1	
nr. Vida	1075.0	99	Apr-July	1188.3	1185.0	1087.6	
South Santiam	603.0	97	Apr-Sept.	723.9	640.3	620.8	
at Waterloo	570.0	97	Apr-July	686.5	610.3	587.9	
North Santiam	932.0	99	Apr-Sept.	793.0	1016.4	939.0	
at Mehamal2	835.0	99	Apr-July	665.6	917.3	839.7	
	5200.0	102	Apr-Sept.	6085.7	5607.6	5091.0	
Willamette River at Salem ¹²	4650.0	102					
			Apr-July	5361.3	4977.5	4550.0	
Clackamas River,	155.0	85	Apr-Sept.	168.0	192.0	181.6	
at Big Bottom	125.0	84	Apr-July	134.3	158.2	148.4	
Oak Grove Fk.	176.0	86	Apr-Sept.	196.0	208.7	203.7	
abv. Power Intake	137.0	85	Apr-July	150.0	164.8	161.0	
Clackamas River	681.0	102	Apr-Sept.	627.6	711.8	665.3	
abv. Three Lynx	587.0	107	Apr-July	525.5	617.9	550.0	
Clackamas River	902.0	105	Apr-Sept.	827.8	883.1	860.0	
nr. Cazadero	826.0	111	Apr-July	707.0	770.3	745.2	

^{*}Discharge data from preliminary records of U. S. Geological Survey and

11 Observed flow plus P.P. & L. Co. power canal.

Oregon State Engineer. 1954 records not available at this time. Observed flow / changes in storage in Crane Prairie, Wickiup and

Crescent Lake Reservoirs.

10 Observed flow / Columbia Southern Canal.

¹² Observed flow \(\nabla \) changes in storage in any of the following reservoirs which are above the station: Lookout Point, Detroit, Fern Ridge, Cottage Grove and Dorena

^CRecords not available.



Streamflow Forecasts - April 1, 1955 (Cont'd.)							
			eamflow in	Thousands	of Acre		
Basin, Stream	Forecast	%	Fore-			10 - Yr.	
and	Runoff	10-Yr.	cast		Runoff*	Average	
Station	1955	Ave.	Period	1953	1952	1943-52	
	OREGON AND	D CALIFORN	IA COAST BA	ISINS			
Umpqua River Basin		0.1	A C - 4	070 1	07.7 (3 7 0 C	
No. Umpqua River,	150.0	84	Apr-Sept.	212.4	217.6	178.5	
below Lake Creek		0.5	A C 4	07 2	86.7	69.0	
Clearwater River,	56.0	81	Apr-Sept.	81.3	00.7	09.0	
above Trap Creek							
Pogue Pirron Pogin							
Rogue River Basin Hyatt Res., net	3.6	62	Apr-Sept.	9.6	9.0	5.8	
Inflow13	5.0	02	whtpehr.	7.0	7.0)• 0	
Fourmile Lake,	5.5	74	Apr-Sept.	2.3	10.0	7.4	
net Inflow14	7•7	14	11p1 - 00p 0 *	2.	10.0	1 • 44	
Little Butte Cr.N.Fk.	. 11.3	69	Apr-Sept.	21.0	21.8	16.4	
below Fish Lake15	· 1100	0)	npr cep o.	21.0	21.0	10 • 4	
Rogue R. So. Fk.,	71.0	85	Apr-Sept.	С	120.3	84.0	
nr. Prospect16	61.0	85	Apr-July	c	104.1	71.9	
Rogue R. Mid. Fk.,	67.0	84	Apr-Sept.	c	96.1	79.5	
nr. Prospect17	53.0	84	Apr-July	c	76.1	63.0	
Rogue River,	300.0	87	Apr-Sept.	416.4	477.1	344.5	
above Prospect	250.0	87	Apr-July	344.5	404.9	288.8	
Rogue River,	640.0	87	Apr-Sept.	c	1007.9	733.7	
below South Fork	520.0	87	Apr-July	c	831.2	597.4	
Rogue River, at Raygol		87	Apr-Sept.	1276.2	1350.1	972.4	
nr. Central Point	710.0	87	Apr-July	1069.7	1150.0	817.7	
Rogue River,	810.0	86	Apr-Sept.	c	1311.7	939.2	
at Grants Pass							
Applegate River,	92.0	76	Apr-Sept.	С	226.0	121.2	
nr. Copper							
Illinois River,	160.0	88	Apr-Sept.	С	241.8	182.5	
at Kerby							

^{*}Discharge data from preliminary records of U. S. Geological Survey and Oregon State Engineer. 1954 records not available at this time.

¹³⁰bserved flow of Keene Creek at Hyatt Prairie / storage changes / 1600 a.f. for estimated evaporation during April-September period.

¹⁴⁰bserved outflow into Cascade Canal / storage changes / 1600 a.f. for

estimated evaporation during April-September period. 150bserved flow plus changes in storage in Fish Lake Reservoir \$\nn\$ 90% of Cascade Canal inflow.

160bserved flow / South Fork Power Canal.

¹⁷⁰bserved flow / Middle Fork Power Canal.

CRecords not available.



Streamflow Forecasts - April 1, 1955 (Cont'd.)							
	Sea		eamflow in	Thousands	of Acre		
Basin, Stream	Forecast	%	Fore-			10 - Yr.	
and	Runcff	10-Yr.	cast	Measured		Average	
Station	1955	Ave.	Period	1953	1952	1943-52	
Klamath River Basin							
Sprague River,	ع 9 <i>د</i>	70	Apr-Sept.	394.5	561.6	264.4	
nr. Chiloquin	185.0	70	whi-peh (.	J74•J	901.0	204•4	
Williamson River,	330.0	77	Apr-Sept.	650.2	831.3	425.9	
below Sprague R.	270.0	75	Apr-July	560.3	746.5	358.9	
Upper Klamath Lake,	427.0		Apr-Sept.	893.8	1151.2	556.5	
net Inflow18	327.0	77 72	Apr-July	738.2	1005.3	451.9	
Clear Lake Res.,	28.0	54	Apr-Sept.	65.7	157.0	52.1	
net Inflow			1 1		_, ,	, <u></u>	
Gerber Res.,	10.0	40	Apr-Sept.	31.3	79.2	24.7	
net Inflow			*				
	GREAT BA	ASIN INTER	IOR DRAINAC	Æ			
Coord Tales Deads							
Goose Lake Basin	25.0	70	A T	۲۱ ۵	90.0	31.6 ^d	
Drew Reservoir,	25.0	79	Apr-July	54.7	89.9	31.64	
net Inflow							
Warner Lake Basin							
Twentymile Cr.	15.8	73	Apr-June	20.0	77.1	21.7	
nr. Adel	1)•0	10	ipi -o aic	20.0	{ { •	CT • 1	
Deep Cr.,	57.5	80	Apr-June	82.0	129.2	71.7	
above Adel	21.02	00	p1 0 4410	02.0	L L/•L	1 0 (
Honey Cr.,	12.8	78	Apr-June	17.0	29.9	16.4	
nr. Plush		, -	1-	_,	-,.,		
Chewaucan River							
Basin							
Chewaucan River,	28.0	36	Apr-June	103.8	150.3	76.8	
nr. Paisley							
Malhaum and Harran							
Malheur and Harney Lakes Basin							
Trout Cr.,	6 5	68	Apr-Sept.	11.2	عا، لا	0.6	
nr. Denio	6.5	00	Apr-Bept.	11.2	24.5	9.6	
Donner und Blitzen	43.0	64	Apr-Sept.	72.1	123.4	67.3	
R.,nr.Frenchglen	4,7 • 0	04	pr bcbo.	(C ● T	14	01.5	
Silvies River,	25.0	23	Apr-Sept.	138.1	235.8	110.7	
nr. Burns	-2.0		rr			22001	

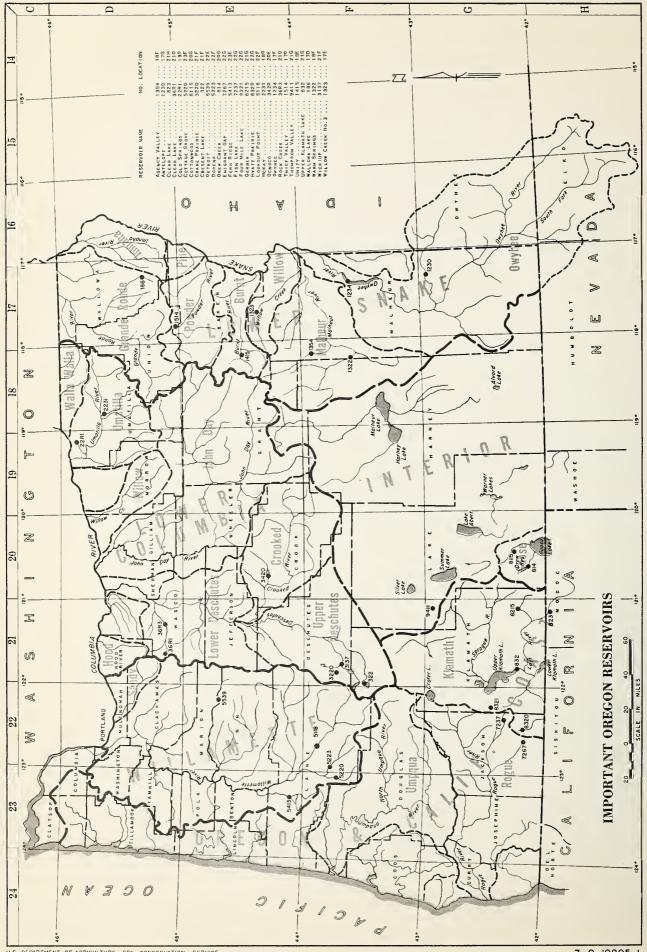
^{*}Discharge data from preliminary records of U. S. Geological Survey and Oregon State Engineer. 1954 records not available at this time.

18From COPCO records of inflow.

CRecords not available. d1943 and 1945 excepted.







STATUS OF OREGON RESERVOIR STORAGE - APRIL 1, 1955

BASIN	THOUSAND ACRE FEET IN STORAGE ABOUT BASIN USABLE APRIL FIRST							
and STREAM	RESERVOTR	CAPACITY (M.A.F.)	1955	1954	1953	10-Yr.Avg. 1943-52		
		PER COLUMBI ower Snake						
Owyhee	Antelope Owyhee	36.5 715.0	3.4 209.2	27.7 533.7	19.3 574.4	17.3 556.5		
Malheur	Warm Springs Agency Valley	191.0 60.0	33•7 27•7	139.9 38.8	164.4 46.6	101.6 46.0		
Burnt	Unity	25.2	4.5	15.4	14.9	12.9		
Grande Ronde	e Wallowa Lake	40.9	18.4	32.8	27.8	18.3		
	LO	WER COLUMBI	A DRAINAG	E				
Umatilla	McKay Cold Springs	74.0 50.0	20 ₀ 2 42,3	43.9 50.0	65.3 44.2	59.5 48.0		
Deschutes	Ochoco Crescent Lake Crane Prairie Wickiup	46.0 54.9 55.3 187.3	23.2 23.1 49.0 194.2	46.8 ^d 38.7 ^c 56.2 199.8	46.8 52.0 50.7 199.1	31.1 45.8 41.8 112.5		
Willamette	Cottage Grove Dorena Fern Ridge Detroit Lookout Point	30.1 ^a 70.5 ^a 94.2 ^a 340.0 ^a 350.0 ^a	17.2 40.6 71.2 74.2 169.1	15.8 34.8 62.4 216.6	19.8 35.7 65.4 150.9 ^f	16.6 58.8 		
	OREGON A	ND CALIFORN	IA COAST	DRAINAGE				
Rogue	Fish Lake Fourmile Lake ^b Emigrant Gap Hyatt Prairie ^b	7.8 16.1 8.3 16.1	5.6 9.9 3.0 10.3	7.0 15.1 8.3 14.5	6.8 14.7 8.3 13.2	5.1 7.4 7.8 6.1		
Klamath	Upper Klamath Lk. Gerber Clear Lake	584.0° 94.0 440.2	469.8 36.8 235.6	492.5 73.1 319.8	503.0 77.1 280.6	417.4 47.1 222.2		
		INTERIOR D	RAI NAGE					
Goose Lake	Cottonwood Drew	4.1 62.5	1.2 28.8	1.3 56.4	1.9 53.9	2.5 47.1		

Klamath Drainage

N.R.--No Report.

aStorage space reserved for flood control.
bBy ditch to Rogue River side from

 $^{^{}m c}$ Based on gage zero elevation of 4135.0.

dSpilling.
eNot full; spilling.
fGross Storage.



The following tabulation of Oregon stream basins presents the water content of the snow about April 1, 1955, as percent of the same date in 1954 and 1953 and

average of record:

average of record:	No. of	Yrs.	Anril	1, 1955-	Water
DRAINAGE	Courses	of		t as per	
	Averaged	Record	1954	1953	Ave.
UPPER COLUMBIA DRAINAGE (Lo					
Owyhee River	16	12 - 27	133	96	79
Malheur River	6	10 - 25	121	75	90
Burnt River	5	10 - 20	126	7 8	94
Powder River	6 5 5 1	16 - 19	106	79	96
Pine Creek		17	89	61	79
Imnaha River	2	13 - 20	68	56	70
Grande Ronde River	9	13 - 26	104	83	97
Wallowa River	2	13 - 20	68	56	70
Catherine Creek	1	17	110	91	99
Main Grande Ronde	6	15 - 26	130	102	115
LOWER COLUMBIA DRAINAGE	,	01	770	3.00	7.00
Walla Walla River	j	24	118	100	108
Umatilla River	5	16 - 26	185	116	138
Willow Creek	1	26 11 - 26	160	83 80	133
John Day River North Fork	12	11 - 26 16 - 26	109 108	82	98 10 3
Middle Fork) 	19 - 20	98	76	90
Main Branch	13 5 .4 2	18 - 25	100	74	89
South Fork	2	11 - 19	110	82	91
Crooked River	4	11 - 26	103	76	84
Deschutes River	12	14 - 26	84	83	94
Hood River	3	17 - 22	111	116	125
Willamette Valley	13	14 - 25	104	107	118
Sandy River	3	17 - 23	113	1 16	123
Clackamas River	3 3 3 4	14 - 23	107	143	124
Santiam Rivers	3	14 - 16	109	111	124
McKenzie River	3	14 - 16	111	103	122
Middle Fork		14 - 25	89	93	105
Coast Fork	1	16	85	99	107
Mary's River					
OREGON AND CALIFORNIA COAST	DRAINAGE				
Umpqua River	4 - 7	11 - 26	86	83	109
Rogue River	14	11 - 24	67	63	75
Upper Rogue	, 5	11 - 22	73	65	77
Bear-Little Butte Creek	4 - 5	18 - 24	76	73	74
Applegate River	4 - 5 5 2	13 - 20	55	56	72
Illinois River		18 - 19	69	74	83
Klamath Lake Basin	17	11 - 28	63	56	65
Williamson River	12 - 13	11 - 27	63 53	54	65
Sprague River Gerber-Clear Lake Basin	7 - 8 2 - 3	14 - 27	51 65	44 61	61 80
INTERIOR DRAINAGE	2 -)	14 - 24	05	OI	00
Goose Lake Basin	3 - 4	14 - 24	70	67	79
Warner Lake Basin	1	14 - 24	77	74	79
Guano Lake Basin					17
Silver Lake Basin	1	14	0	0	0
Chewaucan River	3	16 - 24	43	44	61
Harney Basin	3 8	11 - 24	127	87	95
Alvord Lake Basin	ĺ			64	41
McDermitt Creek	1	5 5		64	41



IRRIGATION WATER SUPPLY FORECASTS

SEASON OF 1955

- Foreword =

Measurements of snow depth and water content were secured on 137 Oregon snow courses as near April 1 as possible. Results of surveys have been computed and furnished in advance of publication to about 26 agencies requesting them. All data are published by the 9th of each month.

Local Water Forecast Committee Meetings were held again this year in ten important irrigated regions of the State during the period March 14 - March 16 and March 28 - April 7 as follows: Pendleton for Umatilla-Walla Basin; Vale for Southeastern Oregon; Lakeview for Southcentral Oregon; Burns for Harney Basin; Canyon City for John Day Basin; Redmond for Central Oregon; Klamath Falls for Klamath Basin; Grants Pass for Southwestern Oregon; The Dalles for Northcentral Oregon; and La Grande for Northeastern Oregon.

These water meetings were jointly sponsored this year by U. S. Soil Conservation Service, Oregon State College Agricultural Experiment Station and Extension Service and U. S. Weather Bureau, Portland River Forecast Center. A Representative of each of the four agencies was present at all meetings and an Information Specialist of the Extension Service prepared news releases for each of the meetings.

Most of the LO cooperating agencies listed on the last page of this report were represented at these discussions.

Each Committee's report, outlining the irrigation water prospect for 1955 in its respective area, is summarized below. Modifications of these forecasts may be required later in accordance with deviations of precipitation and temperature from normal during the runoff season.

The reports on the Pendleton and Vale meeting have been modified for changes in snow-cover and other hydrologic data which have occurred since those meetings were held on March 14 and March 16.

- Forecasts -

Umatilla-Walla Walla Basin

Snow-cover on the watersheds in the Pendleton-Walla Walla area has increased greatly over the near normal situation of March 1. Present snow is 138 percent average on the Umatilla watershed and 108 percent average on the Walla Walla to the north. Mountain soil moisture is very short.

Discharge of the <u>Walla Walla River</u>, South Fork near Milton is forecast at 72,000 acre feet or 92 percent of the 10-year average for April-September. Discharge in the next four months will be 59,000 acre-feet. Little, if any, water shortage is foreseen in the Milton-Freewater area. Even the late water rights on the Hudson Bay and Pleasant View Canals should have a fair water supply. Ground-water levels in this area are below normal.



Flow of the Umatilla River near Gibbon (above Meacham Creek) is forecast at 120,000 acre feet or 123 percent of the 10-year average for April-September. Discharge of the Umatilla River at Pendleton is expected to be 230,000 acre feet or 121 percent of average for the six months. The April-July flow is estimated at 225,000 acre feet. Although downstream storage of water is short, the discharge should be sufficient to provide adequate water supplies.

Cold Springs Reservoir has only 42,300 acre feet in storage compared with 48,000 average at this date. The reservoir should fill and provide an adequate source of water.

Flow of McKay Creek near Pilot Rock is forecast at 34,000 acre feet or 113 percent of the 10-year average for April-September. This flow is somewhat less than the 39,000 acre feet received in 1950. The next four months will bring 33,000 acre feet or nearly all of the flow expected. McKay Reservoir only has 20,200 acre feet in storage compared with 43,900 at this date last year and a 10-year average of 59,500 acre feet. If the forecasted runoff is received there will barely be enough water to supply needs of the users. Only abundant and properly timed rains will make the picture satisfactory.

Birch Creek, Butter Creek, Willow Creek and Rock Creek watersheds all have abnormally dry soils in the upper reaches. Snow cover is 60 percent greater than last year and is 133 percent average. Water supplies in these streams should be sufficient for one good irrigation and many water rights may get more.

Southeastern Oregon

Owyhee Basin snow-cover has increased from 67 percent average on March 1 to 79 percent average April 1 improving the water supply picture over the dim outlook of a month ago. Mountain soils are still very dry.

Net Inflow to Owyhee Reservoir for the April-September period is fore-cast at 184,000 acre feet or 38 percent of the 10-year average (1943-52). The April-July period should bring 166,000 acre feet compared with the average of 468,400 acre feet. March inflow was only 27,000 acre feet or about one-fourth of the average inflow.

Storage in Owyhee Reservoir is 209,170 acre feet, less than half of the supply normally on hand at this date. This is the smallest stored water supply of record on hand at the beginning of the irrigation season. Owyhee Project will have approximately 393,000 acre feet of water from storage and natural flow plus approximately 50,000 acre feet from pumping. Water distribution will be less than in most years unless abnormal rains fill in the shortage.

Jordan Valley lands served from Antelope Reservoir also have a dim water outlook because present storage in the reservoir is only 3,400 acre feet compared with 17,300 on an average. The feed canal is now carrying a full load and storage is improving rapidly. Flow of Jordan Creek is expected to be slightly better than that of last but will fall off considerably before all needs are met. One short irrigation is about all that can be expected from McDermitt and Tenmile Creeks in Upper Quinn River.



Malheur Basin has a snow-cover 90 percent average compared with an average of 72 percent one month ago. Dry watershed soils will substantially reduce the total contribution to the resulting streamflow.

Discharge of Malheur River near Drewsey for the next six months is fore-cast at 42,000 acre feet or half of the average discharge of 84,000 acre feet.

Forecast for the Malheur River, North Fork at Beulah calls for a flow of 36,000 acre feet for the irrigation season. This is only 55 percent of the 10-year average.

Reservoired water supplies in the Malheur watershed are as follows:

Warmsprings Reservoir holds only 33,700 acre feet compared with 139,900 acre feet last year and the 10-year average of 101,600 acre feet. Agency Valley Reservoir holds 27,700 acre feet compared with 38,800 acre feet last year and an average of 46,000 acre feet.

Total water available to the <u>Vale-Oregon and Warmspring Irrigation Districts</u> from storage and natural flow in the Malheur will definitely be less than desired but with careful use may suffice. Good, heavy rains will be needed for a really satisfactory water supply.

The <u>Bully Creek Watershed</u> will produce a very short supply this irrigation season.

Willow Creek Watershed will also produce a short supply of water but lands served from the Willow Creek Reservoir #3 (Malheur Lake) should have a satisfactory supply.

Southcentral Oregon

Snow-cover in Southcentral Oregon and the Lake County area fell off some-what from the conditions as measured on March 1. Therefore, streamflow outlook in this area is poor.

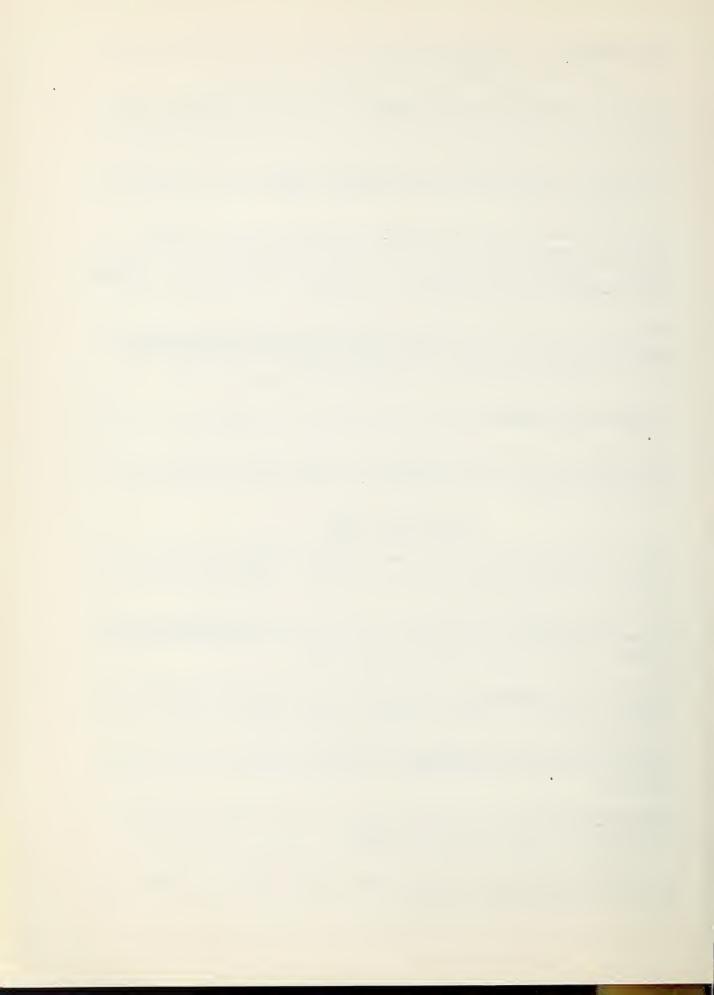
In the Goose Lake Basin discharge of Drews Creek into Drew Reservoir will produce a total inflow of 25,000 acre feet in April-July or 79 percent of average. The 1953 inflow was 54,700 acre feet.

Storage in <u>Drew Reservoir</u> is 28,800 acre feet compared with 56,400 acre feet last year and the 10-year average of 47,100 acre feet. When full at 62,500 acre feet the reservoir is said to hold a two year supply.

Lakeview Water Users, Incorporated will probably have a sufficient water supply this year but careful management by each individual water user is suggested.

Cottonwood Reservoir has 1,200 acre feet in storage; about the same as last year. Themas and Cottonwood Creeks are expected to produce less water than last year.

<u>Crane Creek and Drv Creek</u> and other lower valley streams will produce only short water supplies this season.



Snow-cover in Warner Lake Basin is only 79 percent average and about two-thirds that of last year. Streamflow will be reduced over that of last year and water is definitely not expected to reach Blue-joint Lake this season.

Twentymile Creek near Adel is forecast at 15,800 acre feet or 76 percent of the 10-year average for the April-June period.

Deep Creek above Adel is expected to discharge 57,500 acre feet or 80 percent average in the next three months,

Honey Creek near Plush should flow about 12,800 acre feet or 78 percent average during April-June.

Guano Valley lands are very short of snow and the water outlook is dim with many water holes dry and little water in the lake.

Hart Mountain Refuge area is short of snow and Rock Creek will produce a very short supply of water this season.

Snow-cover in the Chewaucan River - Abert Lake Basin is only 61 percent average and streamflow in this basin will be very deficient. Soils in mountain watersheds are very dry in most areas.

Discharge of Chewaucan River near Paisley is forecast at 28,000 acre feet or only 36 percent of the 10-year average for April-June.

Willow and Crooked Creeks will produce very short water supplies. Abert Lake reached a new high level for recent years with a reading of 4255.63 feet on June 16, 1954. This water level will drop off with below normal streamflow expected this year.

Summer Lake Basin and small streams and springs will likely produce less water than last year. Snow-cover is much below average. The lake level should drop somewhat.

Silver Lake Basin snow-cover is also very much below average and flows of Silver, Duncan, Bridge and Buck Creeks will be well below average. Silver Lake still holds some water. Thompson Valley Reservoir has about 12,000 acre feet of water in storage and is not likely to fill.

The Christmas Lake, Benjamin Lake and Thorn Lake areas are in poor condition this season with soils in very dry condition.

Harney Basin

Snow-cover in Harney Basin has increased somewhat over the March first picture and is now 95 percent of average. However, the watershed soils under the snow are extremely dry and will soak up much more water than usual from the snow-melt. Probably only one irrigation will be given this season and in some cases, where lands are dependent upon small streams heading in low elevations, not even enough water for one irrigation will be found.



Silver Creek, west of Burns, will make a very short flow this year. Lands in the Warmspring Valley and the lower portions of this watershed will be very short of water unless abnormally heavy rains occur.

Flow of Silvies River near Burns is forecast at 25,000 acre feet or only 23 percent of the average of 111,000 acre feet. In 1944 the flow of this stream was about the same as that forecast for this year. The water supplies from this stream will be deficient over most areas. April-June rains will be greatly needed.

The smaller creeks, Rattlesnake, Soldier, Coffee Pot and Cow, have a very dim outlook for water flow. All will be very short.

Discharge of the Donner und Blitzen near Frenchglen is forecast at 43,000 acre feet for the April-September period. Flow will definitely be less than last year and only one irrigation is in sight. Water fowl nesting areas will be further damaged by this low-water season.

The Catlow Valley area and Rock Creek will have a very short water supply.

Trout Creek near Denio will furnish short water supplies from a forecasted flow of 6,500 acre feet. The 10-year average flow for April-September is 9,600 acre feet.

Stock ponds and small reservoirs throughout the Harney Basin are either empty or in poor condition.

John Day Basin

Snow-cover on the John Day watersheds average about normal, but is less satisfactory in the south than in the northern parts. Very dry watershed soils will take up much of the early snow-melt water and reduce total streamflow. Lands served from the major streams should have water for one irrigation only. However, shortages will be greater on short streams heading at lower elevations.

Strawberry Creek near Prairie City will flow about 6,000 acre feet this irrigation season. The average April-September flow is 8,700 acre feet.

Discharge of John Day River at Prairie City is forecast at 36,000 acre feet for the next six months. The 10-year average flow at this station is 54,000 acre feet.

South Fork of John Day River will produce slightly less water than last year.

Flow of John Day, Middle Fork, at Ritter is forecast at 95,000 acre feet or 70 percent of the average for April-September.

North Fork of John Day River near Dale is forecast to discharge 195,000 acre feet compared with the average of 271,000 acre feet for April-September.

Beech Creek, Fox Creek and Long Creek will complete their best flow earlier than last season and will furnish only short supplies. Much the same situation exists on Harwood Creek, Riley Creek and Indian Creek.



Butte Croek, Thirtymile and Rock Creek in the northern part of the John Day basin will have reasonably good flows with about normal water supplies.

Central Oregon

Snow-cover on the Upper Deschutes watershed is 80 percent of last year and 92 percent average. The March increase was better than was expected. In the Crooked River watershed the snow-cover is 103 percent of last year but only 84 percent average. In both watersheds the mountain soils are exceedingly dry and will absorb a great deal of the early snow-melt; therefore reducing streamflow to a considerable degree.

Crooked River near Post is forecast to discharge 74,000 acre feet during the April-September period. This flow will be 55 percent of the 10-year average of 134,000 acre feet. This will provide sufficient water for only one irrigation on most lands.

Net Inflow to Ochoco Reservoir is forecast at 10,500 acre feet or 30 percent of average. The average inflow is 34,500 acre feet. Available storage in Ochoco Reservoir on April 1 was 23,230 acre feet compared with the average storage of 31,100 acre feet. Abnormally heavy spring rains will be needed to insure sufficient water for lands served from this source.

In the <u>Deschutes Basin</u> where storage water is abundant, the water outlook is brighter.

Crescent Creek at Crescent Lake is forecast to discharge 20,000 acre feet compared with the 10-year average of 27,200 acre feet. Due to the present reconstruction activities the available storage in the lake is being held down to about 23,000 acre feet. Water will be "borrowed" from Crane Prairie Reservoir to help satisfy the needs of the Tumalo Project.

The flow of the <u>Little Deschutes near Lapine</u> is forecast at 77,500 acre feet for the next 6 months. The average flow at this station is 107,700 acre feet. The April-July flow will be 71,000 acre feet.

Deschutes River below Snow Creek will discharge 60,000 acre feet or 84 percent of the average flow in the April-September period.

Inflow to Crane Prairie Reservoir is expected to be 120,000 acre feet or 88 percent of the average. Available storage on April 1 was 49,000 acre feet with the probability that some of this water will be used on the Tumalo Project this year.

Odell Creek near Crescent will flow 29,400 acre feet compared to the 10-year average of 33,300 acre feet.

Available storage in <u>Wickiup Reservoir</u> on April 1 was 194,200 acre feet. There should be adequate water supplies for the North Unit.

Water supplies for the Arnold, Central Oregon, Walker Basin and Deschutes Reclaimation and Irrigation Districts should be adequate.

Flow of <u>Tumalo Creek</u>, near <u>Bend</u> will be 42,000 acre feet compared with the 10-year average of 55,400 acre feet. The Tumalo Project should have a sufficient water supply this season.



Squaw Creek near Sisters should discharge 46,000 acre feet in the next 6 months. This will be 86 percent of the 10-year average figure of 53,700 acre feet. This should be a reasonable supply for the old Squaw Creek Irrigation District except for the late water rights and for the Plainview - Mc Allister Ditch which will likely have water only up to July 10th or 15th.

Klamath Basin

The water outlook in this basin is satisfactory for lands served from <u>Upper Klamath Lake</u> but will be a little less rosy for water users served out of <u>Clear Lake and Gerber Reservoirs</u> although this years' crop should not suffer.

Klamath Basin snow-cover is 65 percent average with only 61 percent in the Sprague River area. Soils on mountain watersheds are exceedingly dry and will soak up much snow-melt water this year.

Flow of Sprague River near Chiloquin is forecast at 185,000 acre feet for the April-September period. The 10-year average is 264,400 acre feet. No real water shortages are forseen in this area.

Discharge of Williamson River below Sprague River is set at 330,000 acre feet for the next 6 months. The 10-year average at this station is 426,000 acre feet. The April-July flow is forecast at 270,000 acre feet.

Net Inflow to Upper Klamath Lake is forecast at 427,000 acre feet for the 6 months April-September. This will be 77 percent of the average figure of 556,500 acre feet. The four months April-July should bring 327,000 acre feet. Based on last Septembers measurement of Big Spring Creek at Lenz Ranch, there appears to be a heavy ground-water contribution to the total inflow. The lake will furnish an adequate water supply for irrigation.

Snow-cover in the Lost River watershed is 80 percent average but it rests upon exceedingly dry mountain soils which will soak up an appreciable amount of snow-melt water.

Inflow to Clear Lake Reservoir is forecast at 28,000 acre feet for the next 6 months. Average inflow is 52,000 acre feet. Available storage on April 1 was 235,590 acre feet or 106 percent of the 10-year average.

Inflow to Gerber Reservoir is forecast at 10,000 acre feet April-September. The 10- year average is 24,700 acre feet. Available storage in this reservoir was 36,840 acre feet on April 1. This is 78 percent of the 10-year average.

Small reservoirs and stock ponds in the Klamath Basin are reported to be in poor condition at this date.

Southwestern Oregon

A dim water outlook exists for all irrigated lands in the Umpqua and Rogue watersheds except in the Grants Pass and Fort Vanoy Irrigation Districts. Dry soils in the upper watersheds coupled with a relatively good snow-cover will bring below normal streamflow.



Rogue River snow-cover is 75 percent average and 67 percent of last year. Its effectiveness will be greatly reduced by dry soils.

Rogue River, South Fork is forecast to discharge 71,000 acre feet of 85 percent of the 1943-52 April-September average of 84,000 acre feet. Not since 1947 has discharge been this low in the stream. The discharge for April-July is forecast at 61,000 acre feet.

Rogue River, Middle Fork is forecast at 67,000 acre feet for April-September or 84 percent fo the 10-year average. The April-July flow should be about 53,000 acre feet.

Rogue River, above Prospect is forecast to discharge 300,000 acre feet during April-September and 250,000 acre feet April-July or 87 percent average.

The main stream of Rogue River below South Fork discharge is estimated to be 640,000 acre feet in the next 6 months and 520,000 in the April-July period.

Further downstream the Rogue River at Raygold is forecast to discharge 850,000 acre feet during April-September and 710,000 acre feet in April-July or 87 percent average.

The flow of Rogue River at Grants Pass is forecast at 810,000 acre feet or 86 percent average for the April-September period.

Minimum discharge of Rogue River at Savage Rapids Dam is not expected to drop below 950 cubic feet per second if average conditions of temperature and precipitation occur during the summer months. Canal alternation for Grants Pass Irrigation District begins at a low of 817 c.f.s. and the river is not expected to fall to this low flow figure.

Discharge of Evans, Grave and Jump-off Joe Creeks will fall off sharply: with resulting water shortages beginning in August.

Big Butte Creek will have a below average discharge but will provide sufficient water for the needs of the Eagle Point Irrigation District along with the present full supply in Willow Valley Reservoir.

Little Butte Creek, North Fork below Fish Lake is forecast to discharge 11,300 acre feet or 69 percent average during the next 6 months. Fish Lake Reservoir has 5,551 acre feet in storage compared with 7,000 acre feet a year ago.

Fourmile Lake has 9,927 acre feet in storage and is forecast to receive 5,500 acre feet inflow during April-September. The 10-year average inflow is 7,400 acre feet. Hold over storage from last season is proving to be very helpful this season

Total water supply available to the Medford and Rogue River Valley Irrigation Districts will be deficient toward the latter part of the season and will receive only small contribution from the South Fork of Little Butte Creek because of older water rights having precedence.

Emigrant Gap Reservoir has only 3,000 acre feet in storage as against the 8,200 acre feet it usually holds at this date. Runoff will be insufficient to fill this reservoir unless abnormally heavy rains are received during the irrigation season.



Hyatt Prairie Reservoir has 10,304 acre feet in storage and can expect an inflow of only 3,600 acre feet in the next 6 months. A substantial hold over from last season is a very important factor in this seasons' water picture.

McDonald Ditch will probably be shut down early in July this season.

Total water available to the <u>Talent Irrigation District</u> will be insufficient to operate the project after August unless very heavy rainfall occurs in the early months of the irrigation season.

Flow of Ashland, Neil and Bear Creeks is expected to be deficient by mid-August.

Discharge of the Applegate River at Copper is forecast at 92,000 acre feet compared with the 10-year average of 121,000 acre feet. Shortages for all but the older rights can be expected in late August. Smaller tributaries including Little Applegate, Thompson and Williams Creeks will probably have deficient flows by August.

Streamflow in the <u>Illinois River at Kerby</u> should be 160,00 acre feet compared to the average flow of 182,000 acre feet April-September. Shortages will be similar to those of 1951.

Sucker Creek and East Fork of Illinois River will have deficient flows in late August.

The West Fork Illinois River, Deer Creek and other tributaries of Illinois River will fall off sharply in mid-August.

Umpqua River snow-cover is 109 percent average and 86 percent of last year. The pumice soils of this watershed are better wetted than those of the Rogue and underground water appears to be above average.

Discharge of Clearwater River above Trap Creek is forecast at 56,000 acre feet or 31 percent of the April-September average. The 10-year average flow is 69,000 acre feet.

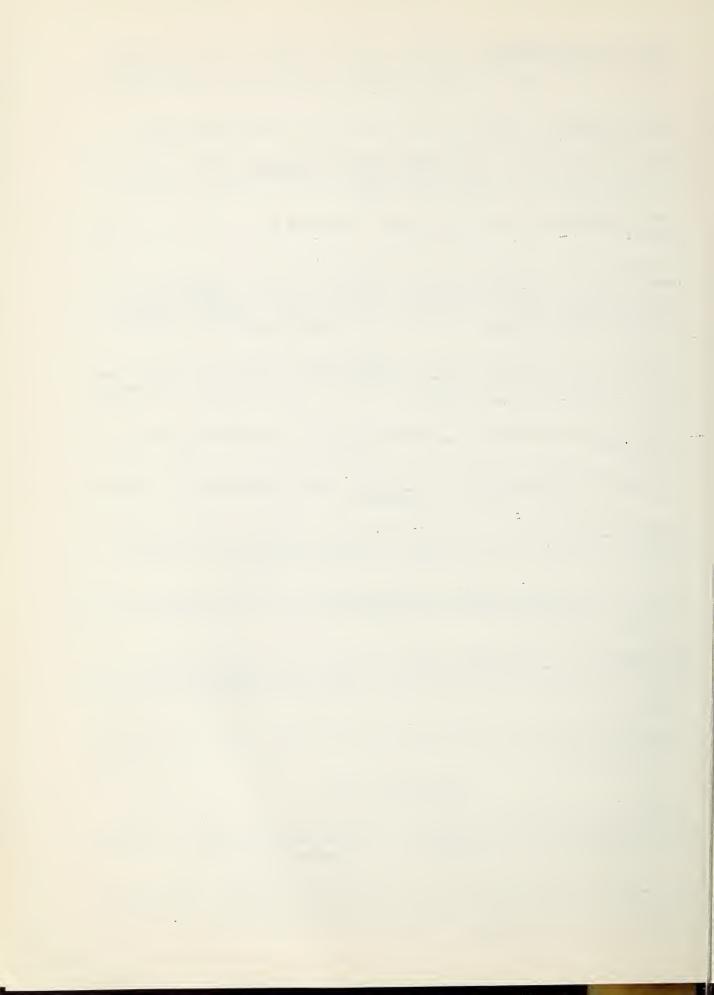
North Umpqua River below Lake Creek is forecast to discharge 150,500 acre feet. February flow of this stream was above average suggesting that ground water contribution is heavy since winter temperatures have been abnormally cold.

Discharge of Cow Creek is expected to become deficient for some irrigators by late August.

Northcentral Oregon

Snow-cover in the Hood River Basin is 125 percent average, while at the head of Mill creek on Brooks Meadows it is 146 percent average. Watershed soils are relatively dry but better than elsewhere in the state.

Hood River near Hood River is forecast to discharge 320,000 acre feet of water or 91 percent average for the April-September period. The April-July flow will be about 270,000 acre feet. Power and irrigation will have satisfactory water supplies.



Hood I River, West Fork near Dee should produce 155,000 acre feet or 93 percent average for the next six months. The flow in the next four months should be about 135,000 acre feet. This will be an adequate supply of water for irrigation.

Flow of Middle and East Forks of Hood River is not gaged but should provide adequate water this year. West side lands served from the Mt. Defiance - Greenpoint source should have water supplies about equal to last year.

Wasco County lands should have reasonably good water supplies this season with snow-cover well above normal and slightly better than that of last year on April 1.

Flow of the Mile Creeks and Mill Creek is expected to be about as good as last year when only a few early shut offs were required.

Tygh, Rock, Gate and Badger Creeks are starting slowly but should produce about the same as last year. Rock Creek Reservoir is not yet full.

Clear, Lost and Boulder Creeks should produce about as much water as last season; probably a good supply for all lands regularly served. Water content of snow at clear Lake is 17.5 inches compared to 15.4 inches last year. Soils are much drier this year.

Discharge of White River below Tygh Valley is foreca t at 160,000 acre feet for A pril-September. This will be 90 percent of the Ten year average of 178,000 acre feet. The April-July period should bring about 142,000 acre feet.

Flow of Trout Creek in southern Wasco and northern Jefferson counties should be short this year. Waterhsed soils are very dry and snow-cover is just below average. One irrigation is all that can be expected and that one may not be complete.

Northeastern Oregon

Snow-cover in the Grande Ronde watershed is 115 percent average for the main river area, 99 percent average for Catherine Creek and 70 percent average for the Wallowa River area. All mountain soils are very dry except where recent snow-melt has wet the top few inches.

Flow of the Grande Ronde River at La Grande has been exceptionally low all winter but is forecast at 160,000 acre feet or 82 percent average for the next six months water direct from t is source should be adequate for irrigation.

Discharge of Catherine Croek near Union is forecast at 62,000 acre feet or 85 percent of the April-September average runoff. This should be a slightly better supply than that of last year with very few shortages.

Ladd Craek flow will fall off earlier than last year and will give only one irrigation.

Wallowa River, East Fork is forecast to flow 7,500 acre feet April-September compared with 11,600 acre feet average. The first four months should bring 6,000 acre feet flow.



Wallowa Lake has 18,400 acre feet in storase which is about average although much below the 32,800 on hand last year. With careful use an adequate supply should be available from this source for the Associated Ditch Companies.

Hurricane Creek near Joseph is forecast at 30,000 acre feet or 62 percent of the 10 year average and should be an adequate supply.

Lostine River near Lostine should discharge 90,000 acre feet compared with the 10 year average of 132,000 acre feet. This will be similar to the discharge in 1944 and should be adequate for irrigation.

Bear Creek near Wallowa is forecast at 48,000 acre feet. The 10 year average is 75,000 acre feet. This stream together with Spring Branches will furnish a somewhat deficient water supply this season.

Flow of Imnaha River is estimated at 170,000 acre feet or 55 percent of the ten year average. Snow-cover is only 70 oercent of average.

Big Sheep Creek will probably produce far less water than last season with shortages developing early for some areas.

Pine Creek watershed has a snow-cover about 10 percent less than last year and 61 percent average. The reduced amount of snow-melt to be available coupled with very dry soils will make the streamflow in this area much below average.

Eagle Creek can expect a flow more nearly equal to last season but probably slightly less in the last weeks.

Wolf Creek should produce only slightly less water than last year but with good rains would be better.

North Powder River and Anthony Creek should flow about the same as last season but will need good rains to sustain the flow.

Rock, Pine, Goodrich, Salmon and other west side creeks should discharge less than last year and will fall off at an earlier date unless good rains are received.

Powder River at Salisbury is forecast at 39,000 acre feet compared with 66,000 acre feet average for the April-September period. The four months April-July will bring 38,000 acre feet of this flow. This 59 percent average flow will be short of valley needs. Dry soils will take up much of the snowmelt water.

Thief Valley Reservoir on Powder River is full and will supply adequate water to lands served by it.

Burnt River near Hereford will supply a total of only 24,000 acre feet or 52 percent of average. Unity Reservoir has 4,488 acre feet in storage as of April 1 and with natural flow should produce a below average water supply. This supply should be sufficient with careful use.

Burnt River lands above Unity Reservoir should have nearly sufficient water even though the flow will be below normal.



Willamette Valley

Snow-cover in the Willamette Valley is now all well above average. The resulting streamflow will be between 84 and 111 percent of the ten year average and will be 102 percent at Salem. (Please turn to page 4 for detailed forecasts on individual streams).



	OTEDUOTA D	21011 00111	210		1 111111	<u> </u>			
				SNC 195 5	W COVER	R MEASUREMENTS Past Record			
DRAINAGE BASIN and SNOW COURSE	No. or State	Elev.	Date of Survey	Snow Depth	Water Content (In.)		Content 1953		Years of Record
	PER	COLU	MBI	<u>A</u> <u>D</u>	RAIN			3	
*Fish Creek *Bear Creek *Granit Peak Upper Jack Creek *Midas *Upper Buckskin *76 Creek *Silvies *Fox Creek Lower Jack Creek Rodeo Flat Big Bend Fry Canyon *Lower Buckskin *Martin Creek Gold Creek *Disaster Peak Silver City South Mtn. #2 Taylor Canyon *Tremewan Ranch	18G2 15H1 17H4 16H2 16H3 17H1 15H3 18G1 15H6 15H6 15H6 15H4 15H7 17H2 17H3 15H5 18H1 16F3 16G1 15H9 15H8	7900 7800 7800 7250 7200 7200 7100 6900 6800 6800 6700 6700 6700 6700 6600 6500 6400 6340 6200 5700	3/31 3/29 3/29 Repor 3/25 3/25 3/25 3/26 3/26 3/26 3/26 3/27 3/21 3/29	t delay 51 24 30 delay 25 35 23 20 16 22 44 35 10 delay 10 delay	17.2 6.7 9.1 8.8 9.9 11.1 8.3 4.0 6.7 4.9 4.8 6.7 4.9 4.8 14.0 10.1 3.3	22.4 12.1 6.3 6.4 0.0 3.2 9.4 12.5 5.9 1.4 3.9 4.9 3.0 4.9 2.0 -13.0 9.6 T	22.1 19.9 9.5 11.4 0.0 5.1 15.5 10.0 8.4 0.0 10.2 9.7 2.1 4.4 6.2 10.1 17.5 9.8 0.0 0.0	25.6 21.5 11.0 11.4 1.8 10.0 12.5 14.2 9.0 3.9 10.5 9.8 10.7 7.6 6.6 15.8 15.1 11.2 3.9 0.9	15 12 14 14 13 18 6 17 18 20 14 27 14 13 15 6 10 14 14 13
*Barney Creek Blue Mtn. Springs Crane Prairie Lake Creek Rock Spring Stinking Water Eldorado Pass	18E14 18E16 18E19 18E18 18F1 18F4 18E20	5950 5900 5375 5120 5100 4800 4600	4/6 3/28 3/28 3/28 3/27 3/28 3/31	22 39 27 30 21 1.0 ^b 5.2	6.7 ^a 13.3 8.9 9.2 5.7 0.3 1.6	6.4 7.5 1.3 0.0	8.8 18.8 11.7 14.1 5.3 0.0 evious re	8.8 10.2 4.7 1.1	10 25 17 17 19
BURNT RIVER Barney Creek Dooley Mountain *Gold Center Tipton Blue Mtn. Summit	18E14 17E1 18E8 18E9 18E13	5950 5430 5340 5100 5098	4/6 4/5 4/1 3/27 3/25	22 25 34 28 30	6.7 ^a 7.9 10.9 10.8 8.2	6.0 4.4 12.5 7.2 5.3	8.8 11.6 15.5 11.3 10.0	8.9 8.9 12.2 9.7 7.7	10 16 16 20 20
POWDER RIVER Anthony Lake Goodrich Lake Summit Springs *Not located d aTelegraphic bPartly estima		7125 6775 6000 on this	4/6 3/30 Report drainag	71 75 t delay ge area	28.5 ^a 26.2 ed	26.7 38.1 ^b 16.6	30.7 48.0 18.6	27.9 41.9 21.1	19 7 18



	OREGON S	NOW SURV	EYS * A	ROOT A	PRIL 1,	1955			
					W COVER				
DRAINAGE BASIN	No.	-		1955 Snow V	Vater	F	est Rec	ord	Years
and	or					Water	Content	(In.)	of
SNOW COURSE	State	Elev. S		(In.)	(In.)	1954	1953		Record
POWDER RIVER (Cont	ıd)								
Bourne	1 8 E5	5800	3/31	43	15.0	15.8	20.6	16.0	19
Taylor Green	17D7	5740	Report			12.8	20.5	16.8	17
Dooley Mountain	17E1	5430	4/5	25	7.9	4.4	11.6	8.9	16
Eilertson Meadows *Gold Center	18E3 18E8	5400 5340	4/1 4/1	34 34	10.9	10.2	15.4 15.5	12.0	17 16
	1010	<i>7</i> 540	4/ 1) 4	10.7	12.07	±,7•,7	1 € • €	10
PINE CREEK									
Schneider Meadows	17D8	5400	3/ 29	65	24.0	27.0	39.3	30.3	17
IMNAHA RIVER									
*Aneroid Lake No. 1		7480	4/1	92	27.4	39,0	48.0 ^b	37.0	20
*Aneroid Lake No. 2	17D2	7000	4/1	73	19.6	30.2	36.1	30.5	13
GRANDE RONDE RIVER									
Aneroid Lake No. 1	17D1	7480	4/1	92	27.4	39.0	48.0b	37.0	20
Anthony Lake	18E1	7125	4/6	71	28.5ª	26.7	30.7	27.9	19
Aneroid Lake No. 2	17D2 18D10	7000 6000	4/1 Report	73 delay	19.6	30.2 16.6	36.1	30.5	13 18
Summit Springs Camp Carson	18D10	5970	4/2	38	11.6ª	11.0	18.6 11.1	21.1	15
Moss Spring	17D6	5850	3/30	74	24.7	22.4	27.2	25.0	17
Taylor Green	17D7	5740	Report	•		12.8	20.5	16.8	17
Beaver Reservoir Tollgate	18D9 18D3	5340 5070	3/29	37	11.7	10.6	12.9	12.0	16
*Lucky Strike	18D6	5050	3/29 3/31	81 47	29.9 14.3	25.3 11.3	30.0 19.5	27.7 13.4	24 16
County Line	18D8	4800	4/1	35	11.8	3.3	7.6	6.0	3
Schoolmarm	18D7	4775	4/1	31	9.9	1.5	4.6	3.4	8
Meacham	18D5	4300	3/29	52	19.0	3.3	8.9	8.4	26
<u>L</u> <u>O</u>	WER	<u>C</u> <u>O</u> <u>F</u> <u>U</u>	<u>M B I 4</u>	<u>D</u> <u>H</u>	RAIN	<u>A</u> <u>G</u> <u>E</u>			
UMATILLA RIVER									
Arbuckle Mountain	19D2	5400	3/30	43	14.2	8.9	17.1	10.7	26
Tollgate	18D3	5070	3/29	81	29.9	25.3	30.0	27.7	24
Lucky Strike Meacham	18D6 18D5	5050 4300	3/31 3/29	47 52	14.3 19.0	11.3 3.3	19.5 8.9	13.4	16 26
Emigrant Springs	18D4	3925	3/29	40	13.3	0.4	2.8	5.5	26
WILLOW CREEK									
Arbuckle Mountain	19D2	5400	3/30	43	14.2	8.9	17.1	10.7	26
WALLA WALLA RIVER									
Tollgate	18D3	5070	3/29	81	29.9	25.3	30.0	27.7	24
*Not located di aTelegraphic.	irectly b	on this d ly estima	rainage	e area.					
-0 	rart.	ry estina	veu.						



				Q M	OW COVER	MEASIN	REMINITS		
				1955	ON COVER		Past Rec	ord	
DRAINAGE BASIN	No.		Date	Snow	Water	T.I.a.t.	Combont	(Tm)	Years of
and SNOW COURSE	or State	Elev.	of Survey		(In.)	1954	Content 1953		Record
JOHN DAY RIVER									
*Anthony Lake Dixie Springs *Snow Mountain Olive Lake Blue Mtn. Springs Arbuckle Mountain Gold Center *Izee Summit Starr Ridge Tipton Blue Mtn. Summit *Lucky Strike Beech Creek Summit Schoolmarm	18E1 18E11 19F1 18E7 18E16 19D2 18E8 19E9 19E7 18E9 18E13 18D6 19E2 18D7	7125 6650 6300 6000 5900 5400 5340 5293 5156 5100 5098 5050 4800 4775	4/6 3/30 3/26 3/23 3/28 3/30 4/1 3/26 3/27 3/25 3/31 3/26 4/1	71 53 36 59 39 43 34 31 24 28 30 47 23	28.5 ^a 17.2 11.6 19.2 13.3 14.2 10.9 8.8 6.5 10.8 8.2 14.3 6.7 9.9	26.7 22.8 12.3 21.3 15.1 8.9 12.5 6.2 3.4 7.2 5.3 11.3 2.5	30.7 28.3 16.2 23.5 18.8 17.1 15.5 8.7 5.4 11.3 10.0 19.5 6.8 4.6	27.9 24.0 14.9 20.1 15.4 10.7 12.2 7.6 4.7 9.7 7.7 13.4 4.9 3.4	19 19 11 19 25 26 16 19 20 20 16 18 8
CROOKED RIVER									
*Snow Mountain Derr Ochoco Meadows Marks Creek	19F1 19E3 20E2 20E1	6300 5670 5200 4540	3/26 3/31 3/30 3/30	36 29 29 9•5	11.6 9.1 8.5 2.8	12.3 9.2 8.1 1.6	16.2 12.8 12.2 0.7	14.9 10.6 9.6 3.0	11 18 26 17
DESCHUTES RIVER									
New Dutchman Flat Paulina Lake Windigo Pass Charlton Lake Three Creek Meadow Willamette Pass Irish-Taylor *Waldo Lake Bobby Lake Tangent Fire Road Cascade Summit New Crescent Lake *Chemult Crescent Lake Hogg Pass Black Pine Spg. Caldwell Ranch Hungry Flat *Brooks Meadows Paulina Prairie Clear Lake	21F2 21F13 22F15 21F7 521E13 22F14 21F6 22F2 21F16 21F3 21F14 22F3 21F10 21F9 21E6 21E11 21F8 21F4 21F4 21D6 21F15 21D12	6400 6330 5800 5750 5600 5500 5450 5450 5450 4860 4760 4765 4400 4400 4285 3500	3/25 3/31 3/30 3/27 3/29 3/29 3/25 3/31 3/29 3/29 3/29 3/29 3/29 3/29 3/21 3/29 3/21 3/29 3/21 3/23 3/23 3/31 3/31	111 39 104 89 59 89 87 49 15 12 12 12 14 17 0 53	43.7 14.1 37.7 31.4 19.6 38.4 37.9 30.9 36.4 16.6 6.2 32.1 15.0 4.9 13.2 49.6 7.2 7.9 5.6 17.0 0.0 17.5	52.2 33.3 24.3 53.1 42.4 33.4 No pr 26.0 No pr 37.8 17.4 11.6 13.3 50.3 2.7 10.6 8.0 16.9	64.8 evious r 54.0 34.7 22.6 50.0 46.9 34.5 evious r 27.6 evious r 34.8 20.3 16.3 14.5 49.8 1.2 14.7 3.1 10.5 evious r	54.7 28.9 20.9 49.2 51.0 30.0 ecord. 30.2 ecord. 31.9 21.4 10.0 10.7 44.6 4.5 9.2 5.5 11.6	3 25 3 17 20 16 3 17 2

 $[\]ensuremath{^{+}\text{Not}}$ located directly on this drainage area. $\ensuremath{^{a}\text{Telegraphic}}$.



	SNOW COVER MEASUREMENTS								
				1955	. 00.1520		ast Rec	ord	
DRAINAGE BASIN	No.		Date		Vater				Years
and	or		of				Content		of
SNOW COURSE	State	Elev.	Survey	(In.)	(In.)	1954	1953	Avg. R	lecord
HOOD RIVER		ζ.							
Tilly Jane-Mt.Hood Red Hill Brooks Meadows Greenpoint Reserv.	21D4 21D6	6000 4400 4300 3400	See A ₃ /27 3/31 3/26	ppendix 157 47 62	p. 9 57.2 17.0 21.3	52.4 57.3 16.9 25.4	44.4 41.9 10.5 9.0	53.1 61.5 11.6 21.0	7 7 22 4
WILLAMETTE VALLEY	STREAMS								
SANDY RIVER ¹ Phlox Point-Mt.Hood Still Creek *Clear Lake	d21D8 21D9 21D12	5600 3700 3500	4/1 4/1 3/31	173 94 53	71.6 34.8 17.5	65.4 28.9 15.4	71.6 24.0 11.2	62.6 24.3 14.1	17 18 23
CLACKAMAS RIVER									
*Clear Lake Peavine Ridge Clackamas Lake Big Bottom Lake Harriet	21D12 21D14 21D13 21D15 21D16	3500 3500 3400 2118 2045	3/31 4/3 3/31 4/2 4/3	53 74 54 33 0	17.5 26.1 18.7 12.0 0.0	15.4 24.8 17.9 9.7 0.0	11.2 19.5 12.9 2.6 0.0	14.1 20.4 15.6 8.8 0.4	23 18 14 4 4
SANTIAM RIVERS		ì							
Hogg Pass Santiam Junction Marion Forks Whitewater Bridge Detroit (new town) Detroit Dam Mill City Snow Line: approxim	22E2 22E3	4755 3990 2730 2175 1500/ 1580 826	3/29 3/29 3/29 3/29 3/29 3/29 3/29	125 81 50 21 0	49.6 34.5 20.3 7.7 0.0 0.0	50.3 27.3 17.8 T 0.0 0.0	49.8 29.6 14.5 0.0 0.0 0.0	44.6 25.8 14.0 7.7 0.0 0.0	16 14 14 5 4 4
McKENZIE RIVER									
McKenzie Hogg Pass Santiam Junction Dead Horse Grade White Branch Slide Lost Creek Ranch McKenzie Bridge Vida Snow Line: approxim	22E4 22E5 22E6	4800 4755 3990 3800 2800 1956 1372 800	4/2 3/29 3/29 4/2 4/2 4/2 4/2	137 125 81 82 42 12 0	54.3 49.6 34.5 30.8 16.4 4.0 0.0	46.8 50.3 27.3 22.8 0.0 0.0	55.1 49.8 29.6 20.1 0.0 0.0 0.0	43.0 44.6 25.8 28.0 6.0 0.0	14 16 14 5 5 3 4

^aTelegraphic ^bPartly estimated.

^{*}Not located directly on this drainage area.

1 Not strictly a part of the Willamette Drainage; these surveys are indicative of west slope conditions.



	OREGON S	NOW SOL	VEIO -	ADOUT I	TRALL I	1955			
					OW COVER				
DDATMAR DAGTA	n.r		-	1955	77.]	Past Rec	ord	77
DRAINAGE BASIN AND	No.		Date of	Snow	Water	Mat on	Content	(In.)	Years
SNOW COURSE	State	Elev.	Survey		(In.)	1954	1953		Record
24011 00 011022	50000	DTC 4 •	our voy	(1110)	(2218)	1774		AVE.	1100014
WILLAMETTE VALLEY MIDDLE FORK WILL)						
			,					•0 •	- \
*Charlton Lake	21F7	5750 5600	3/27	89	31.4	33.3	34.7	28.9	14
Willamette Pass Waldo Lake	22F14 22F2	5600 5500	3/29	98	38.4	53.1	50.0	49.2	8 16
Cascade Summit	22F2 22F3	4880	3/27	87	30.9	33.4 37.8	34.5 34.8	30.0 31.9	25
Champion	22F9	4500	3/28 4/1	82	32.1 31.5	37.0	31.9	29.4	16
Salt Creek Falls	22F4	4000	3/28	99 64	23.6	19.2	20.4	25.6	
Railroad Overpass	22F5	2750	3/28	15	5.0	T T	0.0	3.2	5
McCredie Spring	22F6	2120	3/28	ó	0.0	0.0	0.0	0.0	5
Oakridge	22F7	1310	3/28	0	0.0	0.0	0.0	0.0	ź
Meridian Dam	22F8	750	3/28	0	0.0	0.0	0.0	0.0	55555
Snow Line: Approxi	mately 2	7001	-,						
COAST FORK WILLA	METTE RI	VER (Row	River))					
Champion	22F9	4500	4/1	99	31.5	37.0	31.9	29.4	16
Golden Curry Creek		3136	4/1	25	4.0	0.0	5.4	10.3	
Weaver Creek	22F11	2440	4/1	ó	0.0	0.0	0.0	3.5	Ĺ
Lund Park	22F12	1740	4/1	0	0.0	0.0	0.0	0.0	5 4 5 5
Layng Creek R.S. Snow Line: approxi	22F13 mately 2	1200 500 '	4/1	0	0.0	0.0	0.0	0.0	5
MARY'S PEAK									
Mary's Peak	23E1	3620	Repor	t delæ	yed	8.3	13.3	11.5	14
OREGON A	N D C	ALIF	ORNI	<u> A</u> <u>C</u>	OAS	r de	RAINA	A G E	
UMPQUA RIVER									
Windigo Pass	22F15	5800	3/30	104	37.7	52.2	54.0	54.7	7
Diamond Lake	22F18	5315	4/4	63	23.2	28.0	32.5	20.7	26
Whaleback	22Gl	5140	3/30	90	32.3	39.9	42.8	36.2	17
Champion	22F9	4500	4/1	99	31.5	37.0	31.9	29.4	16
N. Umpqua nr. Lake C:		4215	3/31	48	15.8	18.4	20.3	13.9	17
Trap Creek	22F17	3800	3/31	32	15.5°			11.8	13
Goolaway Mountain	23G1	3780	3/28	16	6.5			4.7	11
Goolaway Gap ROGUE RIVER	23G2	3050	3/28	0	0.0			1.4	12
Wagner Butte	22G18	6900	3/29	42	12.3	23.4	19.9	18.0	20
Seven Lakes No. 1	22G10	6800		t delay		65.9	70.2	58.1	18
Big Red Mountain	22G21	6500	3/27	56	21.4	42.6	42.8	30.7	19
Little Red Mtn.	22G22	6500	3/28	42	15.9	32.9	34.6	24.0	19
*Park Headquarters Scragg Mountain	22G5	6450	4/1	109	41.0	63.6	69.6	65.1	11
ocragg nomitain	22Hl	6200	3/30	52	19.1	37.6	39.5	30.7	13

^{*}Not located directly on this drainage area.

a Telegraphic.

CBased on two samples.



	OILDGON	21.0 0010		IDOUL I		<u> </u>			
			SNOW COVER			MEASUREMENTS Past Record			
DRAINAGE BASIN and SNOW COURSE	No. or State	Elev.	Date of Survey	Snow Depth	Water Content (In.)		Content 1953	(In.)	Years of Record
ROGUE RIVER - (Co	nt'd)								
Seven Lakes No. 2 *Annie Spring *Fourmile Lake Grayback Peak Billie Cr. Divide Whaleback Hobart Lake *Hyatt Prairie Res. Fish Lake Siskiyou Summit Althouse Page Mountain Oregon Caves Goolaway Mountain Silver Burn South Fork Canal Goolaway Gap	22G11 22G6 22G12 23G3 22G13 22G1 22G17	6200 6018 6000 6000 5300 5140 5010 4900 4865 4630 4400 4045 4000 3780 3720 3500	Repor 4/1 3/25 3/31 3/30 3/31 3/30 3/31 4/3 3/28 3/28 3/27 3/28 3/31 3/31 3/28	t delay 89 62 87 58 90 1.5 34 T 0 16 35 0	32.3 25.7 23.9 32.3 0.5 3.6 12.3 T		48.2 56.5 32.4 32.6 24.6 42.8 6.2 12.2 14.2 5.8 evious re		
KLAMATH LAKE BASIN			5, = 0		0.0				
Summer Rim Seven Lakes No. 1 Park Headquarters Seven Lakes No. 2 Annie Spring Fourmile Lake Strawberry *Quartz Mtn.(COPCO) Sun Mountain *Quartz Mountain Billie Creek Divide Crowder Flat Taylor Butte Lake of the Woods Hyatt Prairie Res. Gerber Bly 101 Ranch(COPCO Chemult Yamsey (COPCO) Kirk (COPCO) Beatty (COPCO) Crystal (COPCO) Harriman Lodge(COPC Chiloquin (COPCO) Fort Klamath (COPCO)	20G2 23G10 22G5 22G11 22G6 22G12 20G9 21G2 20G6 20G13 20H2 21G3 22G15 22G16 21G4 0) 10 21F11 12 6 1 4	7200 6800 6450 6200 6018 6000 5600 5504 5350 5300 5200 5100 4960 4850 4860 4600 4533 4300 4200 4187 4150	4/1 Report 4/1 4/1 3/20 3/28 3/31 3/26 3/31 Not st	31 t delay 109 t delay 89 62 20 14 47 13 58 urveyed t delay 15 0 15 ort T 0 10.5	41.0 red 32.3 25.2 3.5 5.0 17.3 4.4 23.9 6 0.8 red 3.6 0.0 0.0 4.9 T	25.5 65.9 63.6 45.1 47.8 25.6 6.7 27.6 6.0 20.3 13.3 12.4 0.0 0.0 11.6 4.5 0.0 7.9 0.0	22.8 70.2 69.6 48.2 56.5 32.4 6.8 33.4 6.2 24.6 0.0 6.7 15.6 12.2 1.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	18.3 58.1 42.9 44.7 29.6.7 28.5 4.0 20.1 10.6 10.0 7 1.1 1.1	18 18 11 18 22 2 14 22 18 24 21 17 18 22 4 26 17 23 27 25 26 27 28

^{*}Not located directly on this drainage area.

⁽COPCO) - Water content determined by melting a measured sample (The California Oregon Power Co.'s Station).

aTelegraphic. bPartly estimated. cSurvey Questioned.



	SNOW COVER MEASUREMENTS								
				1955	J. 00 - 132 - 1		Past Rec	ord	
DRAINAGE BASIN	No.		Date	Snow	Water				Years
and	or		of	Dep th	Content	Water	Content	(In.)) of
SNOW COURSE	State	Elev.	Survey	(In.)	(In.)	1954	1953	Ave.	Record
	T 1/1 T	TOTO	ת ם	D A T	M A C TE				
	T 1/1 T	ERIO	<u>r</u> <u>n</u>	<u>r</u> <u>r</u> <u>r</u>	NAGE				
GOOSE LAKE BASIN									
Camas Creek	20G8	5720	3/26	28	8.6	11.2	11.7	10.9	16
Strawberry	20G9	5600	3/29	20	3.5	6.7ª	6.8	6.7	14
Quartz Mtn. (COPCO)	9	5504	3/28	14	5.0	7.0°		4.9	22
Quartz Mountain	20G6	5320	3/26	13	4.4	6.0b	6.2	4.6	24
				_					
WARNER LAKE BASIN									
*Camas Creek	20G8	5720	3/26	28	8.6	11.2	11.7	10.9	16
GUANO LAKE BASIN									
		(
Bald Mountain	19H1	6720	Repor	t dela	yed	1.4	0.4	3.0	15
CHELINICAN DIVID									
CHEWAUCAN RIVER									
*Summer Rim	20G2	7200	3/26	31	10.1	25.5	22.8	18.3	18
Mill Creek	20GL	6200	3/27	16	4.1	11.4	13.1	7.6	16
*Quartz Mountain	20G6	5320	3/26	13	4.4	6.00	6.2	4.6	24
	2000)) <u> </u>	J, 20	ر ـــ	4•4	0.0	0,2	4.0	24
SILVER LAKE BASIN									
Silver Creek	21F12	4900	3/28	0	0.0	6.2	0.0	1.4	14

HARNEY BASIN									
Tri -1- Character	7.000	7000	_			\			_
Fish Creek	18G2	7900		t dela		22.4	22.1	25.6	15
Silvies	18G1	6900	3/25		11.1		10.0	14.2	17
Snow Mountain	19F1	6300	3/26	36		12.3	16.2	14.9	11
Izee Summit	19E9	5293	3/26	31	8.8	6.2	8.7	7.6	19
Idlewild Camp	18F3	5200	3/27	17	4.8	2.4	6.8	3.9	24
Starr Ridge	19E7	5156	3/26	24	6.5	3.4	5.4	4.7	19
Lake Creek	18E18	5120	3/28	30	9.2	7.5	14.1	10.2	17
Rock Spring	18F1	5100	3/27	21	5.7	1.3	5.3	4.7	19
Stinking Water	18F4	4800	3/28	1.0	0.3	0.0	0.0	1.1	15
ALVORD LAKE BASIN									
*Disaster Peak	18H1	6500	3/31	22	6.5		70.7	٦٢ ٥	ب
	T011T	0)00	2/31	22	0.5		10.1	15.8	5
McDERMITT CREEK									
Disaster Peak	18H1	6500	3/31	22	6.5		10.1	15.8	5

*Not located directly on this drainage area. (COPCO) - Water content determined by melting ameasured sample (The California Oregon Power Co.'s Station).

aTelegraphic. bPartly estimated. cSurvey Questioned.



					OW COVER				
DRAINAGE BASIN	No.		Date	1955 Snow	Water		Past Rec		Years
and	or	779	o.f.	Depth	Content			(In.)	of
SNOW COURSE	State	Elev.	Survey	(In.)	(In.)	1954	1953	Ave.	Record
		<u>M</u> A	R C H	<u>1</u> <u>5</u> ,	195.	<u>5</u>			
WILLAMETTE VALLEY	STREAMS								
SANTIAM RIVERS									
Hogg Pass Santiam Junction Marion Forks Whitewater Bridge Detroit (new town) Detroit Dam Mill City Snow Line: Approximates	22E1 22E2 22E3	4755 3990 2730 2175 1500/ 1580 826	3/15 3/16 3/16 3/16 3/16 3/16 3/16	123 89 54 22 T T 0	41.7 ^b 27.7 18.3 8.7 T	46.4 24.8 16.8 5.7 0.0 0.0		46.4 24.8 16.8 5.7 0.0 0.0	1 1 1 1 1
MIDDLE FORK WILL	ame tt e f	RIVER							
Cascade Summit Salt Creek Falls Railroad Overpass McCredie Spring Oakridge Meridian Dam Snow Line: Approxim	22F3 22F4 22F5 22F6 22F7 22F8 mately 2	4880 4000 2750 2120 1310 750	3/16 3/16 3/16 3/16 3/16 3/16	89 67 21 0 0	28.5 20.4 7.2 0.0 0.0	35.4 17.2 T 0.0 0.0 0.0		35.4 17.2 T 0.0 0.0	1 1 1 1 1
COAST FORK WILLA	METTE RI	VER (R	ow River	r)					
Champion Golden Curry Creek Weaver Creek Lund Park Layng Creek R.S. Snow Line: Approxim	22F11 22F12 22F13	1200	3/15 3/15 3/15 3/15 3/15	99 34 25 0	37.4 ^b 10.0 5.4 0.0 0.0	No pre	evious re	42.0 17.3 ecord. 0.0 0.0	1 1 1
ROGUE RIVER									
Billie Creek Divide Hobart Lake Hyatt Prairie Res. Fish Lake Siskiyou Summit	22G17	5300 5010 4900 4865 4630	3/15 3/15	61 13 21 36 3	22.2 4.1 7.0 12.7 1.0	No pre	vious re	27.4 cord. 7.4 19.3 19.9	4 4 4 1
KLAMATH RIVER									
Billie Creek Divide Lake of the Woods Gerber		5300 4960 4850	3/15	61 34 9	22.2 12.4 3.0	13.3		27.4 17.0 7.2	4 3 1
bPartly estimated.									



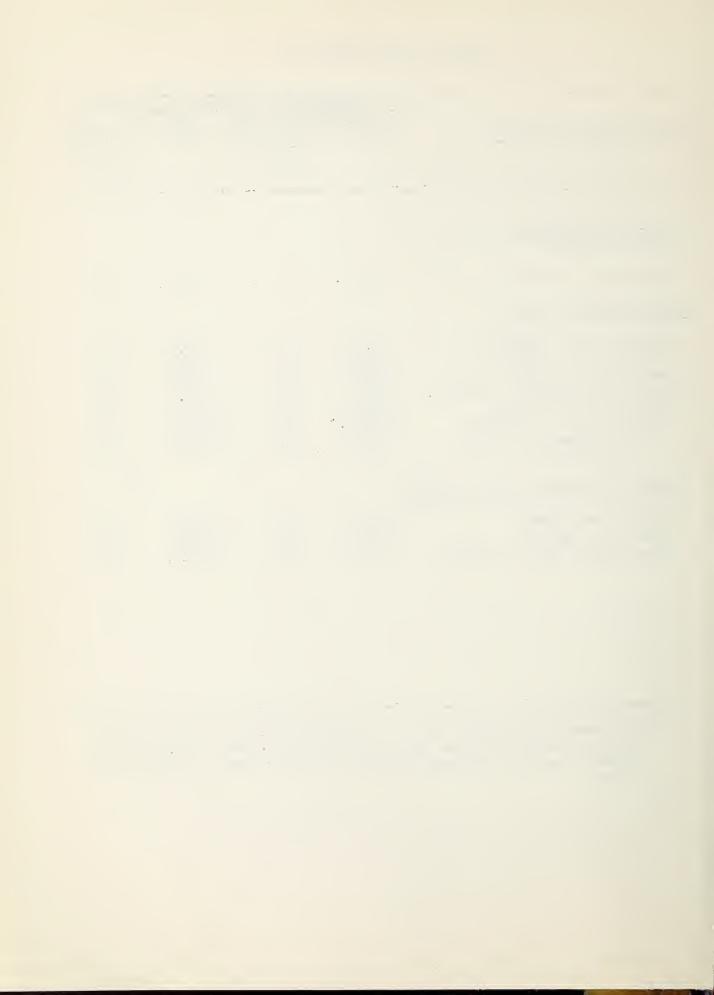
*					OW COVER	MEASUREMENTS
5-1-14 65 51 651	1			1955		Past Record
DRAINAGE BASIN	No.		Date	Snow	Water	Years
and CNOW COUNCE	or	T.D	of			Water Content (In.) of
SNOW COURSE	State	FTev.	Survey	(In.)	(In.)	1954 1953 Ave. Record
	<u>M</u>	A R C	<u>H</u> 15	, <u>1</u> 9	<u>55 (c</u>	<u>O</u> <u>N</u> <u>T</u> <u>*</u> <u>D</u> .)
MALHEUR RIVER						
Lake Creek	18E18	5120	3/15	33	9.4	No previous record.
Rock Spring	18F1	5100	3/15	19	5.i	No previous record.
Stinking Water	18F4	4800	3/15	12	3.9	No previous record.
UMATILLA RIVER						
Tollgate	18D3	5070	3/12	81	26.4	36.2 2
Meacham	18D5	4300	3/12	54	15.5	13.7 2
Emigrant Springs	18D4	3925	3/12	42	12.6	11.4 2
HOOD RIVER						
Tilly Jane-Mt.Hood	21D7	6000	3/19	124	47.4	No previous record.
HARNEY BASIN						
Idlewild Camp	18F3	5200	3/15	18	4.7	No previous record.
Lake Creek	18E18	5120	3/15	33	9.4	No previous record.
Rock Spring	18F1	5100	3/15	19	5.1	No previous record.
Stinking Water	18F4	4800	3/15	12	3.9	No previous record.



CURRENT OREGON STREAMFLOW^a

		nflow in Thous		
		4 - Mar. 1955		1955
BASIN, RIVER and STATION	Total	As percent		
		of 1938-52		of 1938-52
		average		average
UPPER COLUMBIA DRAINAGE (Lower				
Snake in Oregon)				
Owyhee Res. net inflow	88.0	31	27.0	21
LOWER COLUMBIA DRAINAGE				
Umatilla R. nr. Umatilla	58.5	27	10.8	15
John Day R. at Service Cr.	160.0	27	43.8	19
Deschutes R. at Moody Hood R. and conduit nr. Hood R.	1840.0	86	315.4	71
Willamette R. at Salem	323.5 8107.0	70 65	55.7 1783.0	65 81
Willamette R. at Albany	4503.0	60	1113.0	83
M.F. Willamette R. below	685.0	54	183.0	77
North Fk.		Ž.,	10)•0	, ,
OREGON AND CALIFORNIA COAST DRAINAG	3E			
Umpqua R. nr. Elkton	2306.0	55	724.4	90
Rogue R. at Raygold	694.0	53	163.0	60
Upper Klamath Lake net inflow	732.0	105	139.0	91

^aPreliminary data supplied by: U. S. Geological Survey, Current Records Center, Portland, Oregon; The California Oregon Power Co., Medford, Oregon; and North and South Boards of Control, Owyhee Project, Nyssa, Oregon.



OREGON PRECIPITATIONA

	FALL	WINTE	ER
DRAINAGE	SeptOctNov. 19		oMar. 1954-155
DIVISIONS	Observed Departure	observed	Departure D
Southeastern	0.96 - 1.72	2.94	- 1.93
Blue Mountains	2.38 - 2.81	6.11	- 2.86
Wallowa Mountains	3.01 - 2.75	6.51	- 2.02
Lower Columbia	3.14 - 2.21	4.56	- 3.93
Upper Deschutes	1.12 - 2.79	2.16	- 4.23
Willamette Valley	10.91 - 6.72	22.46	- 6.76
Southwestern	3.16 - 4.68	8.47	- 5.41
South-Central	1.49 - 2.18	3.15	- 3.08
		,	

Southeastern

- Owyhee and lower Malheur drainages.

Blue Mountains

- Upper valleys of the Umatilla, John Day and Malheur, and the Powder, Burnt and Silvies drainages.

Wallowa Mountains - Imnaha, Wallowa and Catherine drainages.

Lower Columbia

- Lower valleys of the Walla Walla, Umatilla, John Day and Deschutes, and the Hood and Sandy drainages.

Upper Deschutes

- Upper Deschutes and Crooked drainages.

Willamette Valley - All Willamette drainages.

Southwestern

- Umpqua, Rogue and Williamson drainages.

South-Central

- Sprague, Lost and Interior Basin drainages.

⁻ Preliminary analysis furnished by U. S. Weather Bureau.

b - Departure from 10-year (1943-52) drainage division average.

Note - Precipitation shown in inches.



The following organizations cooperate in the Oregon snow survey work:

STATE

Idaho Cooperative Snow Surveys
Nevada Cooperative Snow Surveys
Oregon Agricultural Experiment Station
Oregon State Engineer and corps of State Watermasters
Oregon State Highway Engineers
Soil Conservation Districts of Oregon

FEDERAL

Department of Agriculture
Cooperative Extension Service
Forest Service
Soil Conservation Service
Department of Commerce
Weather Bureau
Department of the Interior
Bonneville Power Administration
Bureau of Reclamation
Fish and Wildlife Service
Geological Survey
Indian Service
National Park Service
Department of National Defense
Army Engineer Corps

PUBLIC UTILITIES

California-Pacific Utilities Company Pacific Power and Light Company Portland General Electric Company The California Oregon Power Company

MUNICIPALITIES

City of Baker City of La Grande City of The Dalles City of Walla Walla

IRRIGATION DISTRICTS

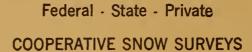
Associated Ditch Companies
Central Oregon Irrigation District
Deschutes County Municipal Improvement District
East Fork Irrigation District
Grants Pass Irrigation District
Jordan Valley Irrigation District
Lakeview Water Users, Incorporated
Medford Irrigation District
Ochoco Irrigation District
Rogue River Irrigation District
Talent Irrigation District
Vale-Oregon Irrigation District
Warmsprings Irrigation District

PRIVATE ORGANIZATIONS

Amalgamated Sugar Company
The Crag Rats, Hood River, Oregon







Furnishes the basic data necessary for forecasting water supply for irrigation, domestic and municipal water supply, hydro-electric power generation, navigation, mining and industry

"WATER IS THE WEST'S GREATEST RESOURCE"